

Collection & Pumping High Flow Event Guidelines 7-14-14

If 1 1/4" of rain or more/any severe weather put on Standby 1 Field Supervisor, 1 Lift Station Crew and 2 other crew members

Conditions	Areas of Concern - Duties	Personal Required	Shift Length as Needed
1 1/4" - 2" Rainfall or Saturated Ground	Monitor SCADA	1 Field Supervisor	1 Field Supervisor 2 Crew
	Monitor Stations & Customer Service	2 Crew members Trucks 714 & 731	
I&I INVESTIGATIONS If after hours notify dispatch	Procedure - Investigation Points	Persons Required Per 12 hr shift	3 crew members + Truck # 766 TV Truck #780 and Truck #755
Priority #1 McDowell flow area Televis Public mains.	Main Line Televising	3 crew + Truck #766 TV Truck #780 and Truck #755	
Priority #2 McDowell Flow Area Public Manhhole Inspections	Use Pole Camera		
Priority #3 McDowell Flow Area Privat Manhhole amin line Inspections	Check manholes to isolate area TV services from cleanouts		

Conditions	Areas of Concern - Duties	Personal Required	Total Personal 12 Hr shifts
2"+ RAINFALL OR HEAVY FLOWS			
STATIONS:	Procedure/Plan	Persons Required Per 12 hr shift	Total Personal 12 Hr shifts
NWPS	Turn 3rd pump off (only 2 pumps to run) Balance Flow betw NOC/NWPS using sluice gate valve	1 Person initially	4Crew 5 Trucks
NOC	SCADA Monitor & Floaters	FS + 1 Truck	
SOC	Bypass with Force main Divertable valve. 6" & 8" Pumps if needed Monitor bypass pumping & Flygt	2 crew + 1 Truck	
Other Stations	Monitor As Needed	2 crew + 2 Trucks	
CUSTOMER SERVICE:			
Water Service Center	Receive Phone Calls/Work Orders Dispatch field crew	1 Clerical	1 Clerical 3 Crew 3 Trucks
	Investigations Calls	3 crew (2 Central/1 North)	
I&I INVESTIGATIONS If at night notify Police Department	See procedure above - Same		See Above
If additional people are needed call WD&M and R&E If more people are needed call Springbrook & CEEC		Total Without I&I Investigation	1 Clerical 10 Crew 8 Trucks

Procedure: Reporting and Estimating Noncompliance Sewer Overflows

7/14/14

Noncompliance is defined as discharge of untreated sewage from the sanitary collection system to a surface water and/or ground. This includes basement backups, due to heavy rainfalls, mainline backups, or lift station failures.

1. When an event occurs, contact the IEPA within 24 hours from the time we become aware of the event

IEPA
Sarah Wiedel
Email: sarah.wiedel@illinois.gov
Phone: (847) 294-4054
Fax: (847) 294-4018

Provide a brief description of the event

2. A written report must be submitted within 5 days from the time we become aware of the event. The report is "Sanitary Sewer Overflow or Bypass Notification Summary Report" available at, epa.state.il.us/water/forms. Send this form electronically.
3. If the NOC or SOC holding ponds overflow take samples and estimate the volume:
 - a) Immediately take two – 1-liter samples to Springbrook lab. Sample testing must be started within 6 hours, make note of where, the time and date. Samples must be kept refrigerated. Daily grab samples must be taken for the duration of the overflow. During nonworking hours contact the lab as follows:

	<u>Home</u>	<u>Work</u>
▪ Dave Nykiel – Manager	non-responsive	x6121
▪ Joseph Slevnik –Supervisor	non-responsive	x6125
▪ Jill Thiel - Chemist	non-responsive	x6128
▪ Bill Goerich – Utility Tech 3	non-responsive	x6128

- b) Keep a log of the "hours" of overflow and estimate the volume (10" flight at SOC, 288,000 gph; SOC lagoon force main valve, 10,000 gpm, 6" pump – 49,500 gph; 4" pump – 24,000 gph, 8" Baker pump - 4,000 gpm). If the divertible valve at NOC is operated, SCADA will report gpm.
4. We must do everything we can to reduce and eliminate overflows. We are not authorized by Permit to discharge.

5. Overflows on private property caused by sewer main surcharging are to be reported to the IEPA. The 24-hour notification process should be used with as much information as possible including the private property address. If the discharge enters a storm sewer system DPW storms (420-6095) must be notified.
6. Send David Nykiel a copy of nay IEPA SSO repaorts
7. Third party notification Requirements:
 - a) Third party notifications may be warranted by overflows that may endanger health due to a likelihood of human exposure.
 - b) Notification must first be reviewed and approved by the Director of Public Utilities-Water, Jim Holzapfel.
 - c) Notification must be coordinated with the City's Communication Manager.
 - d) Notification shall be made to the public, health agencies, and other affected entities.
 - e) Notification should include the following:
 - ✓ Reason for the discharge
 - ✓ The beginning and ending time of the discharge
 - ✓ Water or land area, or both, receiving the discharge
 - ✓ Volume and quality of the discharge

NOC & SOC Wet Weather Holding Lagoons Procedure

The holding lagoons at NOC & SOC are designed to offload sanitary flows during wet weather events to relieve potential surcharging. When wet weather flows subside the holding lagoons are drained back into the sanitary system.

NOC:

1. Monitor SCADA levels at NOC and NW pump stations. Monitor the weather and street flooding.
2. Make sure the holding lagoon drainback valve is closed.
3. Operate the divertible valve at NW pump station to balance flows between NOC & NW wet well with management approval. Only run 4 pumps at NOC and 2 pumps at NW.
4. When NOC wet well reaches 17' and NW wet well reaches 17' and levels continue to rise, pump to the NOC holding lagoon by operating the NOC actuator valve.
5. Monitor flows at May Watts Park
6. Monitor the lagoon level, NOC and NW wet well levels and the weather. If Lagoon is reaching capacity notify a supervisory immediately. NOC wet well level – 22' backups in Cress Creek, NW wet well level – 22' backups Redfield Dr.
7. Stop pumping to the lagoon when NOC & NW wet well levels begin to drop and weather permits. Close the NOC actuator valve. Open force main drain valve from the lagoon to the NOC wet well.
8. Drain the lagoon into the sanitary system ASAP.
9. Treat the lagoon for odor control ASAP.
10. Use 10" Baker pump and road ramp as needed. Notify Fire Station #9 if using road ramp.

SOC:

1. Monitor SCADA levels at SOC pump station. Monitor the weather and street flooding.
2. Make sure the holding lagoon drain back valve is closed.
3. SOC Wet Well reaches level of 16' open force main divertible valve to the lagoon
4. When SOC wet well reaches 17' the Flygt pump will operate and pump to the lagoon.(Only use as needed)

5. Monitor the lagoon level; SOC wet well level, Flygt pump, 8" portable pump and the weather. If Lagoon is reaching capacity notify a supervisory immediately. . SOC wet well level – 22' backups Lemington and Chatham Ct.
6. Stop pumping to the lagoon when SOC wet well levels begin to drop and weather permits.
7. Drain the lagoon into the sanitary system ASAP.
8. Treat the lagoon for odor control ASAP.
9. Use 10" Baker pump as needed. We can pump to the lagoon or the SOC force main.

Any overflows follow WD&C Procedure 3

SPECIAL CONDITION NUMBER.

The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. In order to accomplish these goals, the Permittee shall develop and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan within twelve (12) months of the effective date of this Permit. The permittee should work, as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents.

The CMOM plan shall include the following elements:

A. Measures and Activities:

1. A complete map of the collection system;
2. Schedules, checklists, and mechanisms to ensure that preventative maintenance is performed on equipment;
3. An assessment of the capacity of the collection and treatment system at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; and
4. Identification and prioritization of structural deficiencies in the system.

B. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and,
3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and backups occur; and,
2. Respond to each overflow or backup to determine additional actions such as clean up.

D. System Evaluation Plan.

E. Reporting and Monitoring Requirements.

F. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows that may endanger public health, safety or welfare;
2. Identifies overflows that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.